REMARKS

Claims 1-13, 41, and 46-59 were previously pending in the application, and new claims 60-80 have been added. Claims 11-13 and 54-57 are canceled, and claims 1, 2, 6, 8-10, 41, 46, 49, and 51-53 are amended as set forth above. Accordingly, claims 1-10, 41, 46-53, and 58-80 are pending in the application. The Applicant respectfully requests reconsideration of the application in accordance with the following remarks.

In the Office Action dated September 20, 2004, the Examiner rejected claim 1-9, 11-13, 41-52, and 54-59 under 35 U.S.C. § 103(a) as being unpatentable over Kondo, U.S. Patent No. 6,287,167, in view of Porter et al., U.S. Patent No. 5,056,613. Kondo discloses a drive circuit for a toy car to control a driving motor based on a throttle open degree (See col. 1, lines 5-8; col. 2, lines 55-63). In particular, Kondo teaches a pulse signal from a driving circuit for driving a motor. The driving circuit produces a pulse signal with an increasing pulse frequency and an increasing pulse width as the throttle open degree is increased (See col. 3, lines 5-48). Porter et al. discloses a speed control system having phasing circuitry which provides a sequence of electrical phase steps in response to a comparison of actual vehicle speed to desired vehicle speed.

In accordance with some aspects of the present application, a transition signal is generated based on a change in a throttle signal from a first level to a second level. For example, the transition signal is generated as a result of the throttle signal changing from 0 volts to 6 volts. The transition signal can include one or more signal levels intermediate to a third signal level corresponding to the first level and a fourth signal level corresponding to the second level. For example, the third signal level may be a zero percent duty cycle signal, which corresponds to the zero voltage of the throttle signal; the fourth signal level may be a one hundred percent duty cycle signal, which corresponds to the 6 volt throttle signal; and an intermediate signal level may include a fifty percent duty cycle signal. A transition from the third signal level to the at least one intermediate signal level to the fourth signal level occurs over a significantly longer time period than a time period for the change in the throttle signal from the first level to the second level. For example, the change of the throttle signal from 0 volts to 6 volts may be a step

function, while the transition from the zero percent duty cycle signal to the fifty percent duty cycle signal to the one hundred percent duty cycle signal may occur over one second.

With respect to independent claim 1, the Kondo reference fails to teach or suggest generating a transition signal based on a change in a throttle signal from a first level to a second level, wherein the transition signal comprises at least one signal level intermediate to a third signal level corresponding to the first level and a fourth signal level corresponding to the second level, and wherein a transition from the third signal level to the at least one intermediate signal level to the fourth signal level occurs over a significantly longer time period than a time period for the change in the throttle signal from the first level to the second level. Furthermore, Porter et al. fails to remedy the deficiencies in the Kondo reference. Accordingly, claim 1 and its dependent claims are allowable over the cited references.

Independent claim 41 includes similar limitations to the limitations found in claim 1 and discussed above. Accordingly, claim 41 and its dependent claims are allowable for at least the same reasons as discussed above with respect to claim 1.

New independent claims 62 and 72 have been added. Among other things, new claim 62 recites generating a transition signal based on a binary throttle signal to cause a delay in applying to a motor a power level associated with the binary throttle signal, and applying power to the motor in accordance with the transition signal. For example, a binary throttle signal of 6 volts may be associated with a power level having a one hundred percent duty cycle, and a transition signal based on the binary throttle signal may cause a delay in applying the one hundred percent duty cycle to the motor. The delay may be accompanied by, for example, ramping up a duty cycle, and/or delaying applying any power to the motor following a direction shift. Also among other things, new claim 72 recites generating a transition signal in response to detecting an activation level of a binary throttle signal to cause a delay in applying to a motor a maximum power level associated with the activation level of the binary throttle signal, and applying power to the motor in accordance with the transition signal. The cited references fail to disclose or teach the features of new claims 62 and 72. Accordingly, new claims 62 and 72 and their respective dependent claims are allowable over the cited references.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Enclosed is a check in the amount of $1020.00 for payment of the Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 3/18/05

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